

**Commonwealth of Kentucky
Environmental and Public Protection Cabinet
Department for Environmental Protection
Division for Air Quality
803 Schenkel Lane
Frankfort, Kentucky 40601
(502) 573-3382**

Final

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: Progress Rail Services Corporation
Mailing Address: P.O. Box 1037, Albertville, AL 35950
Attn: Vanden Bergh

Source Name: Progress Rail Services Corporation
Mailing Address: 425 Progress Rail Road
Mayfield, KY 42066

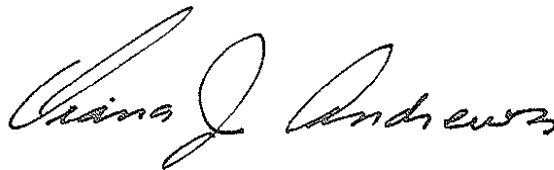
Source Location: At the intersection of Highway 45 South &
Progress Rail Road

Permit ID: V-07-022
Agency Interest : 96472
Activity ID: APE20070001
Review Type: Title V / Synthetic Minor, Operating
Source ID: 21-083-00052

Regional Office: Paducah Regional Office
130 Eagle Nest Drive
Paducah, KY 42003
(270) 898-8468

County: Graves

Application
Complete Date: May 7, 2007
Issuance Date: September 6, 2007
Revision Date:
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**John S. Lyons, Director
Division for Air Quality**

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	Permit type	Log or Activity#	Complete Date	Issuance Date	Summary of Action
V-07-022	Initial Issuance	APE20070001	5/7/2007	9/6/2007	Initial Construction Permit

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit has been issued under the provisions of Kentucky Revised Statutes Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by this Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS

Emission Unit 01 (P1) Locomotive Engine Paint Booth

Description:

Paint booth used to paint the exterior of diesel locomotive engines. Paint is applied using a manual air spray gun. Emissions originate from paint and clean-up solvent use and will exhaust from a single stack through the roof. Particulate matter emissions are controlled by two (2) banks of filters.

Construction Date: Anticipated July 1, 2007

Emission Unit 02 (P2) Locomotive Paint Booth

Description:

Paint booth used to paint interior and exterior of diesel locomotives. Paint is applied using a manual air spray gun. Emissions originate from paint and clean-up solvent use and will exhaust from two stacks through the roof. Particulate matter emissions are controlled by two (2) banks of filters.

Construction Date: Anticipated July 1, 2007

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations which commenced on or after July 2, 1975.

401 KAR 59:225, New miscellaneous parts and products surface coating operations which commenced on or after June 24, 1992 and are part of a major source located in a county designated attainment or marginal nonattainment for ozone in 401 KAR 51:010.

1. Operating Limitations:

- a. The volatile organic compounds (VOC) content of any coating, as applied, (excluding water or exempt solvent or both) used in each coating line shall not equal or exceed 3.5 lbs/gal in order to preclude applicability of the control requirements of 401 KAR 59:225 Section 3. Clean-up solvent is not considered a coating. [401 KAR 59:225 Section 6(1)(b)]

Compliance demonstration method¹:

Compliance will be determined through recordkeeping and reporting. If the coating is thinned, the VOC content of the coating as applied shall be determined by the following

$$\text{equation: } ef = \frac{(\text{volume fraction organic solvent})(\text{average organic solvent density})}{1 - \text{volume fraction of water and / or exempt solvent}}$$

$$\text{Where volume fraction organic solvent} = \left(\frac{\text{vol}_p}{100} \right) \left(\frac{N_p}{N_p + N_T} \right) + \left(\frac{\text{vol}_T}{100} \right) \left(\frac{N_T}{N_p + N_T} \right)$$

¹ Reference: EPA-450/2-78-015, Appendix A

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. Operating Limitations (Continued):

$$\text{Or in general, volume fraction organic solvent} = \sum_{i=1}^n \left(\frac{\text{vol}_i}{100} \right) \left(\frac{N_i}{\sum_{i=1}^n N_i} \right)$$

The variables in the above equations are defined as follows:

vol_P = percent volatile by volume of the paint (excluding water and/or exempt solvent)

vol_T = percent volatile by volume of the thinner (excluding water and/or exempt solvent)

vol_i = percent volatile by volume of component "i" (excluding water and/or exempt solvent)

N_P = Number of parts of paint in multiple part coating

N_T = Number of parts of thinner in multiple-part coating

N_i = Number of parts of component "i" in multiple-part coating

n = Total number of components in multiple-part coating

The *average organic solvent density* will be the average density of the thinner(s). If thinners are not used, the VOC content of the coating as applied can be determined directly from the vendor supplied Material Safety Data Sheet or Technical Data Sheet.

- b. Filters shall be in place and operating efficiently during surface coating operations.

Compliance demonstration method:

Refer to compliance demonstration method for opacity and mass emission standards.

2. Emission Limitations:

- a. There shall be no visible emissions greater than or equal to 20% opacity. [401 KAR 59:010 Section 3(1)(a), Standards for Particulate Matter]
- b. Emissions of particulate matter shall not exceed 2.34 lbs/hr. [401 KAR 59:010, Section 3(2)]

Compliance Demonstration Method:

1. Opacity Standard:

For compliance with the opacity standard, the permittee shall perform a qualitative visual observation of the opacity of emissions at each stack no less than weekly and maintain a log of the observations. If visible emissions from the stacks are seen (not including condensed water in the plume), then an inspection of control equipment shall be initiated and corrective action taken. If visible emissions are present after the corrective action, the process shall be shut down and shall not operate again until repairs have been made that result in no visible emissions from the process during operation. In lieu of shutting the process down, the permittee may determine the opacity using Reference Method 9. If the opacity limit is not exceeded, the process may continue to operate.

2. Mass Standard:

For compliance with the mass standard, the permittee shall visually inspect filters no less than weekly, noting solids buildup and pressure drop across the filters.

- c. Source-wide emissions of individual Hazardous Air Pollutant (HAP) and combined HAP shall not exceed 9.0 and 22.5 tons, respectively per twelve consecutive month period.

Compliance Demonstration Method:

Refer to **SECTION D**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**3. Testing Requirements:**

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the opacity of emissions from each spray booth stack as specified above in **2. Emission Limitations.**
- b. The permittee shall monitor the condition of filters for each spray booth as specified above in **2. Emission Limitations.**
- c. The permittee shall monitor the VOC content of coatings as applied daily.
- d. The permittee shall monitor the emissions of individual HAP and combined HAP emissions monthly.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of qualitative visual observations of opacity and any Method 9 readings performed.
- b. The permittee shall maintain records of filter inspections, including the pressure drop across the filter.
- c. The permittee shall record the date and time of filter replacements.
- d. The permittee shall maintain daily records of the VOC content of coatings as applied; if a thinner is used, these records must include the data required to perform the calculations specified in **1. Operating Limitations.** [401 KAR 59:225, Section 4(8)]
- e. The permittee shall maintain monthly records of the VOC content of coatings, thinners and additives as purchased.
- f. The permittee shall maintain daily records of the usage in gallons of coatings, thinners, additives and clean-up solvents. [401 KAR 59:225, Section 4(8)]
- g. The permittee shall maintain records of the monthly and twelve-month rolling total emissions of individual and combined HAP emissions

6. Specific Reporting Requirements:

It is specified here that the reporting required by **Section F(5)** of this permit shall only be required to include the following:

1. Monthly records of the VOC content of coatings as applied during the compliance period.
2. Records of the monthly and twelve-month rolling total emissions of individual and combined HAP during the compliance period.
3. Records of filter replacements during the compliance period.

7. Specific Control Equipment Operating Conditions:

The pressure drop across the spray booth filters shall be maintained within the indicator ranges specified by the booth/filter manufacturer.

8. Alternate Operating Scenarios:

N/A

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 03 (D1) Dynamometer for Locomotive Engine Testing

Description:

Testing of Locomotive Engines using a dynamometer. Maximum fuel rate: 230 gallons per hour of diesel fuel. Anticipated construction date: July 1, 2007

APPLICABLE REGULATIONS:

401 KAR 50:012, General application, applies to major air contaminant sources in the absence of a standard specified in Kentucky Administrative Regulations.

1. Operating Limitations:

The permittee shall as a minimum apply control procedures that are reasonable, available and practical for the purpose of minimizing emissions. [401 KAR 50:012, Section 1(2)]

Compliance Demonstration Method:

The permittee shall develop and implement a work practice plan within 180 days of the issuance of this permit which establishes test conditions and test durations for locomotive engines which minimize emissions. The work practice plan shall be maintained onsite and be made available to any authorized representative of the Division for Air Quality upon request.

2. Emission Limitations:

Source-wide NO_x emissions shall not equal or exceed 245 tons per consecutive 12-month period.

Compliance Demonstration Method:

Refer to SECTION D.

3. Testing Requirements:

N/A

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the gallons of diesel fuel burned weekly.
- b. The permittee shall monitor the weekly, monthly and twelve-month rolling total emissions of NO_x.
- c. The permittee shall perform all necessary monitoring required by the work practice plan.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain weekly records of the gallons of diesel fuel burned.
- b. The permittee shall maintain records of the weekly, monthly and 12-month rolling total emissions of NO_x.
- c. The permittee shall maintain all necessary records required by the work practice plan.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

6. Specific Reporting Requirements:

It is specified here that the reporting required by **Section F(5)** of this permit shall only be required to include the following:

1. Weekly records of the gallons of diesel fuel burned during the compliance period.
2. Weekly, monthly and 12-month rolling total emissions of NO_x during the compliance period.
3. Records required by the work practice plan during the compliance period.
4. Deviations from the work practice plan that occurred during the compliance period, including time and date of the deviation.

7. Specific Control Equipment Operating Conditions:

N/A

8. Alternate Operating Scenarios:

N/A

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 04 (B1) Abrasive Blasting****Description:**

Abrasive blasting operation for preparing locomotives for painting. Emissions originate from sand abrasive and removed paint and rust. Particulate matter emissions are controlled with a cartridge filter unit with a pulse jet cleaning method.

Construction Date: Anticipated July 1, 2007

APPLICABLE REGULATIONS:

401 KAR 59:010, New process operations which commenced on or after July 2, 1975.

40 CFR 64, Compliance Assurance Monitoring, applicable to a pollutant-specific emissions unit at a major source that uses a control device to achieve compliance with an applicable emission limitation and has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

1. Operating Limitations:

The usage rate of raw materials used in the affected facility shall be limited so that the emission limitations set forth in item 2, below, are not exceeded.

2. Emission Limitations:

- a. Emissions of particulate matter shall not exceed 2.34 lb/hr (determined by Appendix A of 401 KAR 59:010). [401 KAR 59:010, Section 3(2)]

Compliance Demonstration Method:

Compliance will be determined by daily monitoring of filter unit pressure drop, weekly monitoring of visible emissions, record keeping and reporting. If the differential pressure is less than that specified in **7. Specific Control Equipment Operating Limitations**, corrective action shall be taken in order to return the filter unit and/or monitoring system to proper working order. For lower pressure drop readings resulting from filter replacement, the permittee shall record the deviations as such in their daily records. Due allowance will be made for lower pressure drop readings provided the permittee establishes to the satisfaction of the Division that these lower readings only resulted from the replacement of the filters.

- b. There shall be no visible emissions greater than or equal to 20 percent opacity. [401 KAR 59:010 Section 3(1)(a)]

Compliance Demonstration Method:

1. Visible emissions from the filter unit exhaust shall be monitored weekly using the visible/no visible emission observation techniques of EPA Reference Method 22;
2. If visible emissions from the filter unit exhaust are seen (not including condensed water in the plume), then an inspection shall be initiated of control equipment and corrective action taken. If visible emissions are present after the corrective action, the opacity shall be determined by Reference Method 9;
3. Maintain records and follow reporting procedures specified below.

3. Testing Requirements:

Testing shall be conducted at such times as may be required by the Cabinet in accordance with 401 KAR 59:005, § 2(2) and 50:045, § 4.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**4. Monitoring Requirements:**

- a. The permittee shall monitor the filter unit pressure drop daily as specified in **2. Emission Limitations.**
- b. The permittee shall monitor visible emissions weekly as specified in **2. Emission Limitations.**

5. Recordkeeping Requirements:

- a. The permittee shall maintain a log of the daily filter unit pressure drop readings.
- b. The permittee shall maintain a log of the weekly Method 22-like observations.
- c. The permittee shall maintain records of any corrective actions taken as a result of a pressure drop reading out of the range specified in **7. Specific Control Equipment Operating Conditions.**
- d. The permittee shall maintain records of the date and time of filter replacements.
- e. The permittee shall maintain records of any corrective actions taken as result of seeing visible emissions.
- f. The permittee shall maintain records of any Method 9 readings conducted as a result of seeing visible emissions.
- g. The permittee shall maintain records of pressure drop gauge calibrations checks.

6. Reporting Requirements:

It is specified here that the reporting required by **Section F(5)** of this permit shall only be required to include the following:

1. Summary information on the number, duration and cause (including unknown cause, if applicable) of pressure drop excursions and/or visible emissions, as applicable, and the corrective actions taken;
2. Summary information on the number, duration and cause (including unknown cause, if applicable) for pressure drop gauge downtime incidents;
3. Records of the date and time of filter replacements during the compliance period.

7. Specific Control Equipment Operating Conditions:

- a. The minimum accuracy of the pressure drop gauge shall be +/- 0.5 inches of water.
- b. The pressure drop gauge calibration shall be checked annually.
- c. The permittee shall begin monitoring and recording pressure drop across the filter unit within ten (10) days following start-up of abrasive blasting operations. Filter unit readings shall be taken daily except on days when no abrasive blasting occurred, in which case an entry shall be made in the log noting such. After compiling thirty (30) days of filter unit pressure drop data, the permittee shall submit a notification to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office,. The notification shall specify the minimum pressure drop across the filter unit in order to assure compliance and shall provide manufacturer's guaranteed efficiency data for the actual installed equipment.
- d. Refer to **SECTION E** for general control equipment requirements.

8. Alternate Operating Scenarios:

N/A

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. While these activities are designated as insignificant the permittee must comply with the applicable regulation and some minimal level of periodic monitoring may be necessary. *It is specified here that the monitoring requirements for the activities listed below are: Maintain records of annual natural gas usage.*

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Diesel Storage Tank, 10,000 Gallons	N/A
2. Clean Engine Oil Storage Tank, 4,000 Gallons	N/A
3. Used Engine Oil Storage Tank, 4,000 Gallons	N/A
4. Alkaline Washing with NG Fired Heater (4.19 MM Btu/hr)	401 KAR 59:015
5. Fire Water Tank NG Fired Boiler (1.25 MM Btu/hr)	401 KAR 59:015
6. Comfort Heating	N/A
7. Welding Operations	401 KAR 59:010

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Nitrogen Oxide, Particulate Matter and Volatile Organic Compound emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. The emissions of any individual Hazardous Air Pollutant (HAP) shall not exceed nine (9) tons during any consecutive twelve (12) month period. The emissions of combined HAP shall not exceed twenty-two and one-half (22.5) tons during any consecutive twelve (12) month period. Monthly records, which demonstrate compliance with this limitation, shall be maintained and total HAP emissions shall be reported on a semi-annual basis. HAP emissions shall be calculated and recorded on a *monthly* basis. These records shall be summarized in tons per month HAP emissions; subsequently, tons of HAP emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with HAP emission limitations listed herein for the purpose of precluding applicability of 40 CFR 63.3880 to 63.3981 (Subpart M), "National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products", incorporated by reference in 401 KAR 63:002. These records, as well as purchase orders and invoices for all HAP containing materials, shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.

Compliance Demonstration Method:

HAP "a" emitted (lb/month) = \sum [Emission of HAP "a" from coatings and cleanup solvents from surface coating operations]

HAP "a" emitted (lb/month) from Engine and Locomotive painting:

$$E_{HAPa} = Q_P * CP_{HAPa} + Q_R * CR_{HAPa} + Q_S * S_{HAPa} \text{ (Eq. 1)}$$

$$Q_C = Q_P + Q_R \text{ (Eq. 2)}$$

$$Q_P = Q_C * \left(\frac{\text{Gallons of paint "i"}}{\text{Gallons of paint "i" + Gallons of reducing solvent "i"}} \right) \text{ (Eq. 3)}$$

$$Q_R = Q_C * \left(\frac{\text{Gallons of reducing solvent "i"}}{\text{Gallons of paint "i" + Gallons of reducing solvent "i"}} \right) \text{ (Eq. 4)}$$

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

Note: Equation 1 shall be used for determining monthly and twelve-month rolling total HAP emissions. Equations 2 through 4 shall be used for completing the annual emission inventory survey as required by 401 KAR 52:020, Section 22. Q_C shall be the value in gallons entered on the KYEIS survey representing coating use for each surface coating line and shall reflect coating as applied per calendar year.

Where

E_{HAPa} = Emission rate of HAP "a" in pounds per month.

Q_P = Gallons of paint "i" used per month.

CP_{HAPa} = Content of HAP "a" in paint "i" (lb/gal).

Q_R = Gallons of reducing solvent "i" used per month.

CR_{HAPa} = Content of HAP "a" in reducing solvent "i" (lb/gal).

Q_C = Gallons of coating (paint and reducer mixed) as applied used per month.

Q_S = Gallons of clean-up solvent used per month.

S_{HAPa} = Content of HAP "a" in clean-up solvent (lb/gal)

The general equation for multiple-part coatings is:

$$Q = Q_T * \frac{N_i}{\sum_{i=1}^n N_i}$$

Where:

Q = Material usage rate (gal/hr) of component (e.g., coating, thinner)

Q_T = Total multiple-part coating material usage rate (gal/hr)

N_i = Number of parts of component "i" in multiple-part coating

n = Total number of components in multiple-part coating

Referenced from U.S. EPA Emission Inventory Improvement Program, Technical Report Series, Volume II, Chapter 7, Preferred and Alternative Methods for Estimating Air Emissions from Surface Coating Operations (July, 2001).

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

4. NO_x emissions shall not exceed 245 tons during any consecutive twelve (12) month period. Weekly and monthly records to demonstrate compliance with this limitation shall be maintained and total NO_x emissions shall be reported on a semi-annual basis. NO_x emissions shall be calculated and recorded on a *weekly* basis. These records shall be summarized in tons per month of NO_x emissions; subsequently, tons of NO_x emissions per rolling 12-month period shall be recorded. In addition, these records shall demonstrate compliance with the NO_x emission limitations listed herein for the purpose of precluding the applicability of 401 KAR 51:017, Prevention of Significant Deterioration. These records shall be maintained on site for a period of five years from the date the data was collected and shall be provided to the Division upon request.

Compliance Demonstration Method:

$$\text{NO}_x \text{ emitted (lb/week)} = \sum [\text{NO}_x \text{ emissions from Engine Testing}]$$

$$E_{\text{NO}_x} = Q * EF_{\text{NO}_x}$$

Where

Q = gallons of diesel fuel burned per week.

EF_{NO_x} = 270 g/gal = 0.5952 lb/gal.

NO_x emission factor is referenced from EPA420-F-97-051, Emission Factors for Locomotives (December, 1997)

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020 Section 3(1)h the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020 Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1 the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The owner or operator shall report emission related exceedances from permit requirements including those attributed to upset conditions (other than emission exceedances covered by Section F.7 above) to the Regional Office listed on the front of this permit within 30 days. Deviations from permit requirements, including those previously reported under F.7 above, shall be included in the semiannual report required by F.6 [Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
9. Pursuant to 401 KAR 52:020, Permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

- f. The certification shall be postmarked by January 30th of each year. Annual compliance certifications shall be mailed to the following addresses:

Division for Air Quality
Paducah Regional Office
130 Eagle Nest Drive
Paducah, KY 42003

U.S. EPA Region 4
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth St.
Atlanta, GA 30303-8960

Division for Air Quality
Central Files
803 Schenkel Lane
Frankfort, KY 40601

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within thirty (30) days of the date the KYEIS emission survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS**1. General Compliance Requirements**

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020 Section 3(1)(b) and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020 Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the U. S. EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020 Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. Except for requirements identified in this permit as state-origin requirements, all terms and conditions shall be enforceable by the United States Environmental Protection Agency and citizens. [Section 1a-15-b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3)(b)].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3)(d)].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3)(a)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of a permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in the permit and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020 Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the SIP or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

SECTION G - GENERAL PROVISIONS (CONTINUED)**4. Construction, Start-Up, and Initial Compliance Demonstration Requirements**

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, **emission units 01, 02, 03, 04 and those activities listed in SECTION C**, in accordance with the terms and conditions of this permit.

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, with a copy to the Division's Frankfort Central Office, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. For those affected facilities for which construction is authorized by this permit, a source shall be allowed to construct with the proposed permit. Operational or final permit approval is not granted by this permit until compliance with the applicable standards specified herein has been demonstrated pursuant to 401 KAR 50:055. If compliance is not demonstrated within the prescribed timeframe provided in 401 KAR 50:055, the source shall operate thereafter only for the purpose of demonstrating compliance, unless otherwise authorized by Section I of this permit or order of the Cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. *(It is specified here that this performance demonstration shall consist of a presentation of the records required by this permit to field office personnel upon request.)* Testing must also be conducted in accordance with General Provisions G.5 of this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements

- a. Pursuant to 401 KAR 50:045 Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60) days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least Thirty (30) days prior to the test.
- b. Pursuant to 401 KAR 50:045 Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NOx compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

SECTION G - GENERAL PROVISIONS (CONTINUED)**7. Emergency Provisions**

- a. Pursuant to 401 KAR 52:020 Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.01-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.
 - (5) This requirement does not relieve the source of other local, state or federal notification requirements.
- b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
- c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].

8. Ozone Depleting Substances

- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.166
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515.

- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

N/A

SECTION I - COMPLIANCE SCHEDULE

N/A